

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Art Unit: 1616
Ehrenfreund et al. Examiner: Qazi, Sabiha Naim
Intl. Appln. No.: PCT/EP03/11805 Conf. No. 1925
IA Filing Date: October 24, 2003
U.S. Appln No.: 10/532,847
§ 371 Date: April 27, 2005
For: Cyclopropyl-thienyl-carboxamide as fungicides
Action: **PRE-APPEAL BRIEF REQUEST FOR REVIEW**
Date: July 16, 2007

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this Request.

This Request is being filed with a Notice of Appeal and the appeal fee.

The Review is being requested for the reasons stated on the sheets attached hereto.

Applicants do not believe any additional fees are due with this request. If additional fees are due, please charge the required fees to Deposit Account No. 50-1676 in the name of Syngenta Crop Protection, Inc.

Respectfully submitted,

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/Rebecca A. Gegick/
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Date: July 16, 2007

PRE-APPEAL BRIEF

The present Pre-Appeal Brief responds to the final Office Action dated February 15, 2007 having a shortened statutory period for response set to expire May 15, 2007. Filed concurrently herewith is a request for a two (2) month extension of time to respond, making the present Amendment due by July 15, 2007, a Sunday such that the Pre-Appeal Brief is timely if filed on Monday, July 16, 2007.

In the Final Office Action, claims 1, 3-5, 9 and 10 were pending, with claims 6-8 withdrawn from consideration pursuant to Applicants' election to proceed with the examination of Group I in response the Examiner's Restriction Requirement. In the final Office Action, the Examiner maintained the previous rejection of the claims under 35 U.S.C. § 103(a) as being unpatentable over EP 0737682 A1 to Yoshikawa et al. Indeed, the Examiner made the identical rejection of the claims in the previous Office Action, mailed July 12, 2006. In response thereto, Applicants again take the position that the Examiner has not met the burden of establishing a *prima facie* case of obviousness and respectfully requests the withdrawal of the claim rejection. Applicants note that the arguments set forth herein are generally the same as those submitted in Applicants' Amendment filed November 29, 2006. Applicants are unclear from the Examiner's comments as to why the claim amendments and supporting arguments in that Amendment were not found persuasive¹ and therefore are unable to address any particular concern the Examiner may have had to maintain the rejection here.

I. The Examiner has not sufficiently supported a *prima facie* case of obviousness.

The Examiner bears the initial burden of presenting a *prima facie* case of obviousness during examination. (MPEP § 2142, p. 2100-121). To meet this burden, it is incumbent upon the Examiner to present evidence or a plausible rationale that would support a motivation to modify the reference to arrive at the claimed invention. This burden requires more than a reliance on a mere statement that the suggested modifications of the prior art are well within the ordinary skill of the art "without some objective reasoning to combine the teachings of the references." (MPEP § 2143.01, p. 2100-137). Rather, the Examiner appears to merely rely on a statement that Applicants' invention is obvious, which is improper. The Examiner's "reasons" provided in support of the § 103(a) rejection are provided here:

¹ "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument *and answer the substance of it.*" (emphasis added) MPEP § 707.07(f).

- Obviousness rejections are maintained because claims are generically taught by the prior art. See for example in Yoshikawa et al. formula (I) on page 2 where Q can be hydrogen and R can be cycloalkyl group having 3-10 carbon atoms. Cycloalkyl group is directly attached to thiophene ring. (final OA, p. 6). Applicant is kindly requested to clearly point the specific differences from the prior art.²

- Instant claims differ from the reference in that they are of different generic scope. (final OA, p. 2).

- The instant claimed compounds would have been obvious because one skilled in the art would have been motivated to prepare compounds embraced by the genus of the above cited references [*sic*] with the expectation of obtaining additional beneficial compounds. The instant claimed compounds would have been suggested to one skilled in the art. (final OA, p. 2).

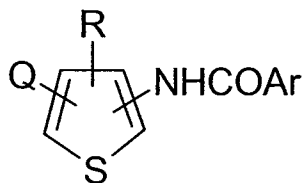
As may be appreciated, then, the Examiner appears to support the obviousness rejection of the claims with a mere "obvious to try" statement. Nothing in these statements appears to provide evidence or a rationale indicating how a person of ordinary skill in the art would be led by the reference to arrive at Applicants claimed invention. Accordingly, Applicants respectfully submit that the Examiner has not met the proper burden of establishing a *prima facie* case of obviousness.

II. The Yoshikawa et al. reference does not lead the skilled person to the presently claimed invention.

Assuming, *arguendo*, that one of ordinary skill in the art would expect to obtain alternative beneficial compounds by modifying the Yoshikawa et al. formula, as the Examiner suggests, Applicants submit that he/she would not arrive at the invention as claimed. There is nothing explicit or inherent in the reference that could lead one of ordinary skill in the art to first, select the placement of substituents at specific sites on the thiophene ring, and next, to select the claimed substituents from a vast list of alternatives.

Yoshikawa et al. teach a substituted thiophene derivative having the general formula:

² Applicants provided a number of specific differences in their previous Amendment and are unclear how to respond to this request.



(Yoshikawa et al., p. 2, lines 45-53). As shown, the thiophene derivative is substituted at various positions by Q, R, and NHCOAr groups. This general formula represents a vast number of compounds. First, since the Q, R, and NHCOAr groups are not in fixed locations about the thiophene, any one of the groups can be located at any one of the four available sites. Second, Q, R, and Ar represent a significant number of groups. Accordingly, just to arrive at a compound within the scope of Applicants' claimed invention, one would have to:

1. Select the cyclopropyl group for R from:

a straight or branched alkyl group having 1-12 carbon atoms, straight or branched halogenoalkyl group having 1-12 carbon atoms, straight or branched alkenyl group having 2-10 carbon atoms, straight or branched halogenolkenyl group having 2-10 carbon atoms, alkoxyalkyl group having 2-12 carbon atoms, alkylthioalkyl group having 2-10 carbon atoms, cycloalkyl group having 3-10 carbon atoms, halogen substituted cycloalkyl group having 3-10 carbon atoms, or a phenyl group which can be substituted with 1-3 substituents; the substituent of said phenyl group is a hydrogen atom, alkyl group having 1-4 carbon atoms, alkenyl group having 2-4 carbon atoms, alkynyl group having 2-4 carbon atoms, cycloalkyl group having 3-6 carbon atoms, alkoxy group having 1-4 carbon atoms, halogenoalkoxy group having 1-4 carbon atoms, alkylthio group having 1-4 carbon atoms, alkylsulfoxy group having 1-4 carbon atoms, alkylsulfonyl group having 1-4 carbon atoms, halogen atom, cyano group, acyl group having 2-4 carbon atoms, alkoxycarbonyl group having 2-4 carbon atoms, amino group or amino group substituted with alkyl group having 1-3 carbon atoms

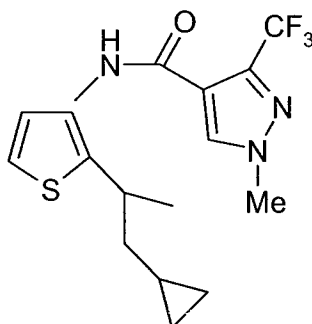
2. Place the cyclopropyl group in the ortho-position.

3. Attach a substituent to the C3-cycloalkyl group selected from alkyl, alkenyl, alkynyl, cycloalkyl, phenyl and heterocycli (which are each optionally substituted).

Applicants submit that the Yoshikawa et al. reference does not guide one to make all of these modifications without hindsight reasoning, which is improper to support a prima facie case of obviousness.

Moreover, as mentioned already, the Yoshikawa et al. formula represents a vast number of thiophene derivatives. Of these, the reference provides specific examples of approximately 200 derivatives. Not one of these 200 specific compounds falls within the scope of Applicants' claims. Moreover, not one of these specified compounds has a C3-C10-cycloalkyl in the ortho-position of the thienyl, let alone a cyclopropyl group.

From the 200 specific compounds disclosed in the cited reference, the Examiner highlights compound 1.41 disclosed in the Yoshikawa et al. reference in Table 5 on page 30 to support the argument that Applicants' invention is obvious. That compound is provided below for convenience.



Yoshikawa et al.
p. 30 Compound 1.41

As argued in the previous amendment, compound 1.41 is quite far removed from the claimed compound. First, the thiophene of Compound 1.41 is *indirectly* substituted by the cyclopropyl via an alkyl chain. In other words, this thiophene derivative is substituted by an alkyl group, which is substituted by cyclopropyl. Compound 1.41 is *two structural features removed* from Applicants' claimed invention. To arrive at Applicants' invention, Compound 1.41 would have to undergo the following modifications:

1. **Exchange the substituted alkyl group in the ortho-position with a cyclopropyl group.**
- AND**
2. **Attach a substituent (selected from alkyl, alkenyl, alkynyl, cycloalkyl, phenyl and heterocyclyl) specifically to this cyclopropyl group.**

There is no teaching whatsoever in Yoshikawa et al. to guide the skilled person to perform these modifications. The general disclosure of Yoshikawa et al. (page 2-3) teach that the ortho-substituent could be C3-C10-cycloalkyl. But what would guide him/her to select cyclopropyl? What would guide him/her to substitute this cyclopropyl with alkyl, alkenyl, alkynyl, cycloalkyl, phenyl or heterocyclyl? Applicants respectfully submit that the reference, as a whole, can not lead one of ordinary skill in the art to modify the general formula to thereafter arrive at Applicants' claimed invention. Nor does the reference guide one of ordinary skill to handpick

Compound 1.41 from a list of approximately 200 compounds, and then modify it to arrive at the claimed invention.

Applicants respectfully assert that the claims are in complete condition for allowance and the Panel is courteously solicited to pass this application on to allowance. No other fees are believed to be payable at this time. However, the Commissioner is authorized to debit any applicable fees from the deposit account of the undersigned, no 50-1676 in the name of Syngenta Crop Protection, Inc.

Respectfully submitted,

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